



SRO 852 Waterproofing Specification – Undertile Membrane

Weldtec Sheet Rubber Membrane System – Protected

Scope

Sheet membrane applied internally and externally to suitably prepared substrates prior to the installation of wall and floor tiling.

Applications

Typical applications include.

- Internal wet area walls and floors
- External decks, podiums, balconies and rooftops

Substrates

Suitable substrates include.

- Concrete and rendered brick or blockwork
- Compressed fibre cement sheeting
- Sheet timber – plywood (internal & external) - must not be LOSP treated.
- Sheet Timber – particleboard (internal floors only)
- Sheet wall linings approved for internal wet areas

Surface Preparation

Concrete must have completed the minimum 28-day curing /drying period, be structurally sound and free of all contaminants (e.g. laitance, form release agents). Steel trowel finished concrete needs to be treated by mechanical methods such as shot blasting or grinding to achieve a fine textured open surface. Any holes are to be filled with [ARDEX A 46](#) patching mortar or the [ARDEX BR 345](#) system. All surface protrusions/sharp edges are to be ground flat.

Sheet timber substrates must have moisture content below 20% prior to the installation of the sheet membrane.

All sheet substrates are to be fixed in accordance with the sheet manufacturers' instructions with all screw fixings flush with the sheet surface. All substrates shall be free of contaminants such as waxy/oily residues, paint over-spray and/or debris from other trades.

Sheet Membrane System

- [ARDEX WPM 750](#) / [ARDEX WPM 1000](#) Undertile Butynol Rubber is adhesive fixed to the prepared substrates by suitably trained applicators using [ARDEX WA 98 Adhesive](#) (external use) or [ARDEX CA750](#) (internal use)

Note: [ARDEX WPM750](#) is for internal use only whereas [ARDEX WPM1000](#) can be used both internally and externally.

Note: [ARDEX WA 98](#) Adhesive is hydrocarbon solvent based adhesive. Internal application of this adhesive is NOT recommended and should not be used internally to fix these membranes.

If substrates are sound and smooth, priming is not required for this adhesive fixed sheet membrane.

If the substrate externally is highly porous then a prime coat using a 50:50 mix of [ARDEX WA 98](#) Adhesive with [ARDEX WA 98 SOLVENT](#) can be applied and allowed to dry before standard membrane installation is applied.

Membrane Installation

The product data sheet provides diagrams of typical installations to internal wet areas. Externally the same installation principles apply. Where possible install a strip of the [ARDEX WPM 750](#) to rebates prior to the



installation of door frames leaving sufficient membrane to allow continuation of the membrane over the external deck.

The [ARDEX WA 98](#) solvent based adhesive (external use) or the [ARDEX CA750](#) water based adhesive (internal use) is used to secure the sheet membrane to the prepared substrate. The sheet is then unrolled and allowed to relax for at least 30 minutes prior to being cut to size. Apply the [ARDEX WA 98](#) / [ARDEX CA750](#) to the prepared substrate and simultaneously to the back of the sheet rubber at not less than 5m² per litre. These adhesives can be applied by brush, roller or spray equipment. When the adhesive has dried clear, apply the sheet rubber taking care to smooth the sheet to minimise entrapment of air. Floor sheets of [ARDEX WPM 750](#) / [ARDEX WPM 1000](#) must be turned up adjacent walls at least 150mm high or in accordance with AS4654.2. All sheet overlaps shall be welded using approved hot air welding equipment.

Once the installation has been completed for at least 60 minutes, the membrane may be flood tested and / or tiled using nominated ARDEX adhesives such as [ARDEX X 56](#), [ARDEX X 77](#) + [E 90](#), [ARDEX X 18](#) + [E 90](#), [ARDEX Optima](#) or [ARDEX Abaflex](#).

Toppings screeds may also be applied directly to the sheet rubber membrane using sand/cement mixed with [ARDEX WPM 405](#) additive. The screed shall be a minimum of 15mm and applied over a wet bonding slurry consisting of [ARDEX WPM 405](#) mixed with Portland cement. The screed is left to dry for 24 hours prior to adhesive fixing the tiles with selected ARDEX adhesives. If deemed necessary, the screed shall be left to dry for 7 days prior to the application of an ARDEX liquid applied membrane that is compatible with the tile adhesives. This membrane will prevent moisture getting into the screed and thus reduce the potential for efflorescence.

Allow the tile adhesive to dry for 24 hours prior to grouting using ARDEX cement based grout such as the [ARDEX FG 8](#) range mixed with [ARDEX Grout Booster](#). Movement joints must be included in the tile finish in accordance with the recommendations of AS3958.

Protection system to allow for application of elevated Pod-Paver systems

An increasing number of requests are arising for membranes suitable for waterproofing prior to installation of elevated Pod and Paver toppings. The ARDEX Weldtec range has been specified for these applications on the proviso that a protective layer is installed to protect the active membrane from direct abrasion.

Once the [ARDEX WPM 1000](#) has been installed and pick-tested, a spongy protection pad or strip is recommended to be used under the supporting frame system.

Protection can be granted through the use of an Ardex Protection Board, Coreflute sheeting or loose pads of the WeldTec membrane. This protection is to prevent abrasion of the membrane as the pads move slightly as people transit the decking and underlying supports.

Care must be taken to ensure the supporting frames are placed evenly over the protective strips to ensure the supporting framework does not sit directly on the membrane and damage it. Any damage caused by insufficient protection of the membrane from the paver pad will void any warranty.

Once the elevated tile support framework is positioned over protective strips, tile installations can proceed.

NOTE: Cleaning solutions must be given the OK by ARDEX first or warranty is voided. High pressure water blasting is not recommended, or extreme care must be proven to be taken to not pierce the [ARDEX WPM 1000](#).



Disclaimer

The recommendation selected is based upon questions answered on the ARDEX Australia website. This recommendation is designed as a general application for your described situation and should not be considered site specific documentation for general distribution. Always consult the latest relevant ARDEX Technical Bulletins and information on the product packaging and/or product data sheets (available on the ARDEX Website). Australian and other relevant standards should be followed during installation. If you have any further questions or would like further clarification, please contact the ARDEX Technical Services Hotline on 1800 224 070 (9am to 5pm Monday to Friday).